



## MORTARS AND GROUTS FIELD SECTION 1066

**1066.1 Scope.** To establish procedures for inspection and reporting of grouts and mortars and design of mixture.

**1066.2 Procedure.** The components of mortar or grout are to be inspected and reported.

**1066.2.1** Cement is to be Type I, unless otherwise specified in the contract and is to be inspected and reported in the same manner as described in [Field Sec 1019](#) of this Manual.

**1066.2.2** Sand shall be clean and shall meet the quality requirements of Specification Sec 1005 except the minus No. 200 [75  $\mu$ m] sieve requirement does not apply.

**1066.2.3** Hydrated lime is to be accepted on the basis of the bag label, manufacturer's certification, or sampling and testing. If sampled, a 5 lb [2 kg] sample is to be obtained by taking a 1 lb [400 g] sample from the top of not less than 5 bags. The individual samples are to be combined, thoroughly mixed, placed in a cement sample bag with plastic liner, and submitted to the Laboratory and a record entered in SiteManager.

**1066.2.4** Unpolished aluminum powder for use in expansive mortar is to be accepted on the basis of the container label or manufacturer's certification.

**1066.2.5** Qualified non-metallic expansive mortars complying with the requirements of Specification Sec 1066.1.4.2 are listed in [Field Section FS-1066 Table 1](#) of this Section. Only qualified non-metallic expansive mortars are to be used. If the contractor requests to use an expansive mortar not listed in [FS-1066 Table 1](#), the manufacturer of that expansive mortar will be required to submit a 50 lb. [20 kg] sample for approval, the manufacturer's specifications, and general data information. The State Project Operations Engineer, will approve or disapprove the use of the proposed expansive mortar. Upon qualification of this material, it may be accepted for use on the basis of container labeling.

**1066.3 Mix Design.** The proportions for the various grouts and mortars are specified in Specification Sec 1066. The mix characteristics and batch weights [masses] may be calculated in the same manner as described for portland cement concrete in [Field Sec 501.2.3](#) of this Manual. It may be necessary to submit samples of sand to the Laboratory for determination of specific gravity and unit weight [mass], if they cannot be ascertained from the "Physical Characteristics of Principal Portland Cement Concrete Aggregates in Missouri."

**1066.4 Sample Record.** Reports are to indicate acceptance, qualified acceptance, or rejection. Appropriate remarks, as described in [General Sec 7.1.2](#) of this Manual, are to be included in the report to clarify conditions of acceptance or rejection.

**1066.4.1** Sand, hydrated lime, unpolished aluminum powder, and non-metallic expansive mortars shall be reported through SiteManager with distribution per [General Sec 7.1.7.1](#) Class A.

**1066.4.2** Cement shall be reported as described in [Field Sec 1019](#) of this Manual.



**1066.4.2** Cement shall be reported as described in [Field Sec 1019](#) of this Manual.

**1066.4.3** Grout or mortar mix shall be reported on Form C-681, if the mix is produced by ready-mix or central mix. No report is necessary for hand-mix. Distribution of Forms C-681 shall be as described in Sec 500 of the Construction Manual.

